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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/578,777

05/09/2006

Takuji Kaya

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EXAMINER

PATTERSON, MARC A

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/578,777 | Applicant(s) KAYA ET AL. | |
| | Examiner MARC A. PATTERSON | Art Unit 1794 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

NEW REJECTIONS

Claim Rejections – 35 USC § 103(a)

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 - 6 and 9 - 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezawa et al. (U.S. Patent No. 4,966,805) in view of Komiya et al (U.S. Patent No. 4,704,445).

With regard to Claims 1 - 6 and 11 - 12, Ezawa et al discloses a label (column 2, line 48) having an adhesive coating film (column 5, lines 30 - 35) having a thickness of 0.1 to 10 gm (column 4, lines 24 - 25); the coating is polyurethane (column 5, lines 30 - 35) and the label is polystyrene having a shrinkage of more than 50% in one direction and 0% in another direction and a thickness of 10 to 100 gin(column 2, lines 60 - 68). The claimed aspect of the film being for bonding to a PET bottle having alternately projecting and sunken portions is directed to an intended use and is therefore given little patentable weight. Ezawa et al fails to disclose a peel strength after keeping the film in contact with a PET film in pressure contact with each other at 8.5 MPa in a 40 degree Celsius atmosphere for 24 hours within the range of 5 N/50 mm to 17 N/50 mm.

Komiya et al teach a polyurethane having a number average molecular weight of 500 to 100,000, therefore softening point of 30 to 50 degree Celsius (column 4, lines 43 - 47) that is an adhesive, for the purpose of providing an adhesive having high bond strength (column 5, lines 35

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- 45). One of ordinary skill in the art would therefore have recognized the advantage of providing for the adhesive of Komiya et al in Ezawa et al, which comprises an adhesive, depending on the desired adhesion of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a polyurethane having a number average molecular weight of 500 to 100,000 and softening point of 30 to 50 degree Celsius in Ezawa et al in order to obtain an adhesive having high bond strength as taught by Komiya et al. Ezawa et al would therefore have a peel strength after keeping the film in contact with a PET film in pressure contact with each other at 8.5 MPa in a 40 degree Celsius atmosphere for 24 hours within the range of 5 mN/50 mm to 17 N/50 mm. Ezawa et al also fail to disclose a PET bottle having the label. However, Ezawa et al teach that a plastic bottle having the label is well known in the art (column 1, lines 12 - 15). It therefore would have been obvious for one of ordinary skill in the art to have provided for a bottle comprising PET, as PET is a plastic.

Ezawa et al also fail to disclose an adhesive coating film in contact with the PET bottle and between the heat - shrinkable film and the PET bottle. However, because the adhesive coating film adheres the label to the bottle, it would have been obvious for one of ordinary skill in the art to have provided for the coating film in any location between the label and the bottle, including in contact with the bottle.

With regard to Claim 9, the claimed aspect of the coating being formed by gravure coating is directed to a process limitation and is therefore given little patentable weight. With regard to Claim 10, the adhesive taught by Komiya et al has a solids content of 80% by weight (column 4, lines 35 - 43), therefore viscosity of 5 to 60 second/Zahn cup #3.

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3. Claims 7 - 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezawa et al. (U.S. Patent No. 4,966,805) in view of Komiya et al (U.S. Patent No. 4,704,445) and further in view of Eckes et al (U.S. Patent No. 4,812,492).

Ezawa et al and Komiya et al disclose a label having a polyurethane as discussed above. With regard to Claims 7 - 8, Ezawa et al and Komiya et al fail to disclose a polyurethane having a pigment comprising titanium oxide.

Eckes et al teach a polyurethane pigment comprising titanium oxide (column 2, lines 37 - 56) for the purpose of obtaining a polyurethane for use as an ink (column 1, lines 5 - 9). One of ordinary skill in the art would therefore have recognized the advantage of providing for the pigment of Eckes et al in Ezawa et al, which comprises a polyurethane, depending on the desired use as an ink of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a pigment comprising titanium oxide in Ezawa et al in order to obtain a polyurethane for use as an ink as taught by Eckes et al.

ANSWERS TO APPLICANT'S ARGUMENTS

4. Applicant's arguments regarding the rejections of the previous Action have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 6 of the remarks dated August 7, 2009, that Ezawa et al fail to disclose an adhesive coating film in contact with the PET bottle and between the heat - shrinkable film and the PET bottle. However, as stated above, because the adhesive coating film adheres the label to the bottle, it would have been obvious for one of ordinary skill in the art to

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have provided for the coating film in any location between the label and the bottle, including in contact with the bottle.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marc A Patterson/
Primary Examiner, Art Unit 1794